weight fully twenty pounds. He now walks vigorously, feels in excellent health and spirits, and conducts his business with usual mental and physical activity.

The daily, in fact the hourly, changes in the component parts of the human body are mysterious and difficult to define, and nowhere more so than in the nervous system, the centre of thought, intellectual power and locomotion. My object in producing this paper is to sift a portion of the wheat from the chaff, and define a few of the limitations and possibilities of electricity. One point is certain: where damage to neurones or their nuclei have cut muscle fibres off from the normal source of stimulating energy, electricity is of little account, as far as maintaining muscular contractility is concerned. The reaction of degeneration is characterized by loss of excitability in the nerves and of the excitability to rapidly interrupted currents in the muscles. The reaction of degeneration is of great moment, and when present a lesion in some part of the nervous tract is readily diagnosticated. In such conditions, electrolysis is useless. In nerve degeneration, when the induced current fails to meet with any response, it is called the reaction of degeneration. Weakened muscle cannot be strengthened by too strong a current, and such action must be avoided. So also with weakened nerve tissue. The power of the current must be graduated in proportion to the strength of either muscle or nerve.

"There is a great probability that a nervous impulse may be a change propagated by electrical agency, and even in its essential nature, an electrical phenomenon, a travelling and temporary dislocation of pre-existing discrete particles, and not a travelling process producing new and differently gifted particles from the old." It is as solutions of electrolytes confined to minute cylinders, that nerve fibres have a most important interest, and yet the characters of these solutions are beyond the reach of methods of ordinary chemical investigation. In the transmission of the electric current, it is well to be aware of the remarkable discovery of Du Bois Raymond, that the whole longitudinal surface of the individual nerve fibre is probably equally positive, and the whole transverse surface uniformly negative. In order to intensify the conduction of the electric current, moisture is not only necessary externally, but is well provided for internally, as the nerve fibre is, throughout, a moist conductor. Nerve fibres are in fact only finely drawn processes of cells, containing inorganic salts within them, and the electrical conductivity is provided by the electrotonic currents and by their distribution. The axis cylinder of the nerve fibre is a better conductor than the tissues which ensheath the fibre, and more electricity, in fact, is carried or conveyed along the axis cylinders than is at the same time carried by the other tissues of the nerve. The electrical phenomena of nerve depend entirely on the inorganic salts which